

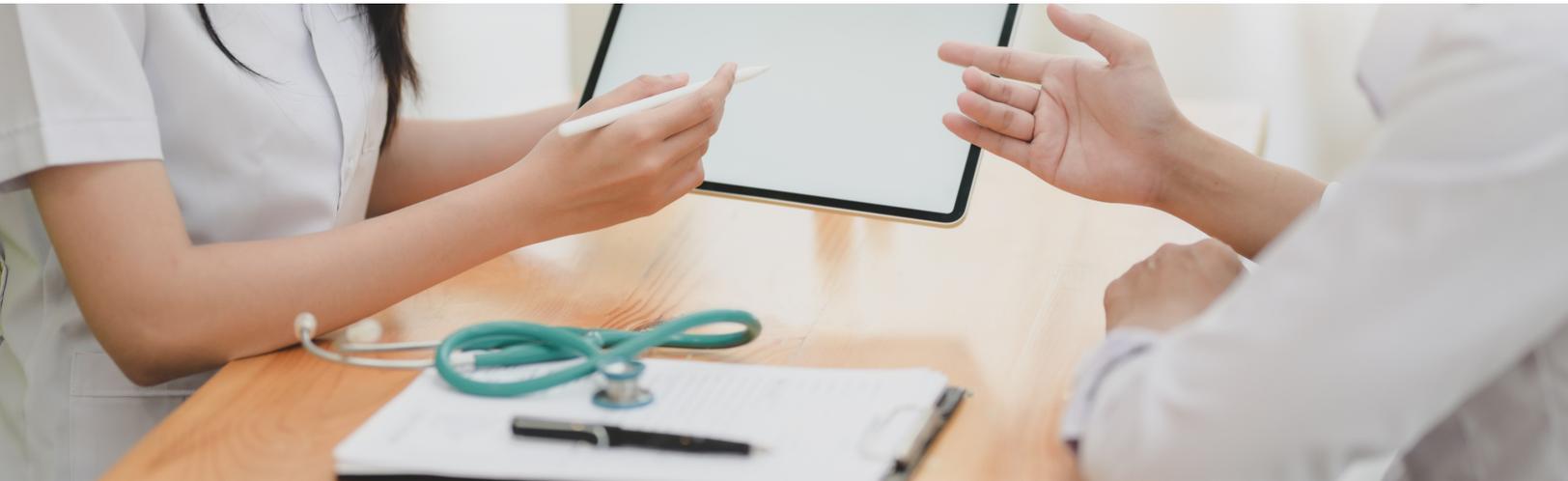


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PSLL MONTHLY NEWSLETTER

Patient Safety Learning Lab

Division of General Internal Medicine | Brigham and Women's Hospital



About

The Quality & Safety Dashboard

The Quality and Safety Dashboard is an Epic-integrated tool that enables clinicians to proactively identify quality & safety risks for patients in real-time. Patient data is gathered from various siloed parts of the EHR and placed in one convenient display.

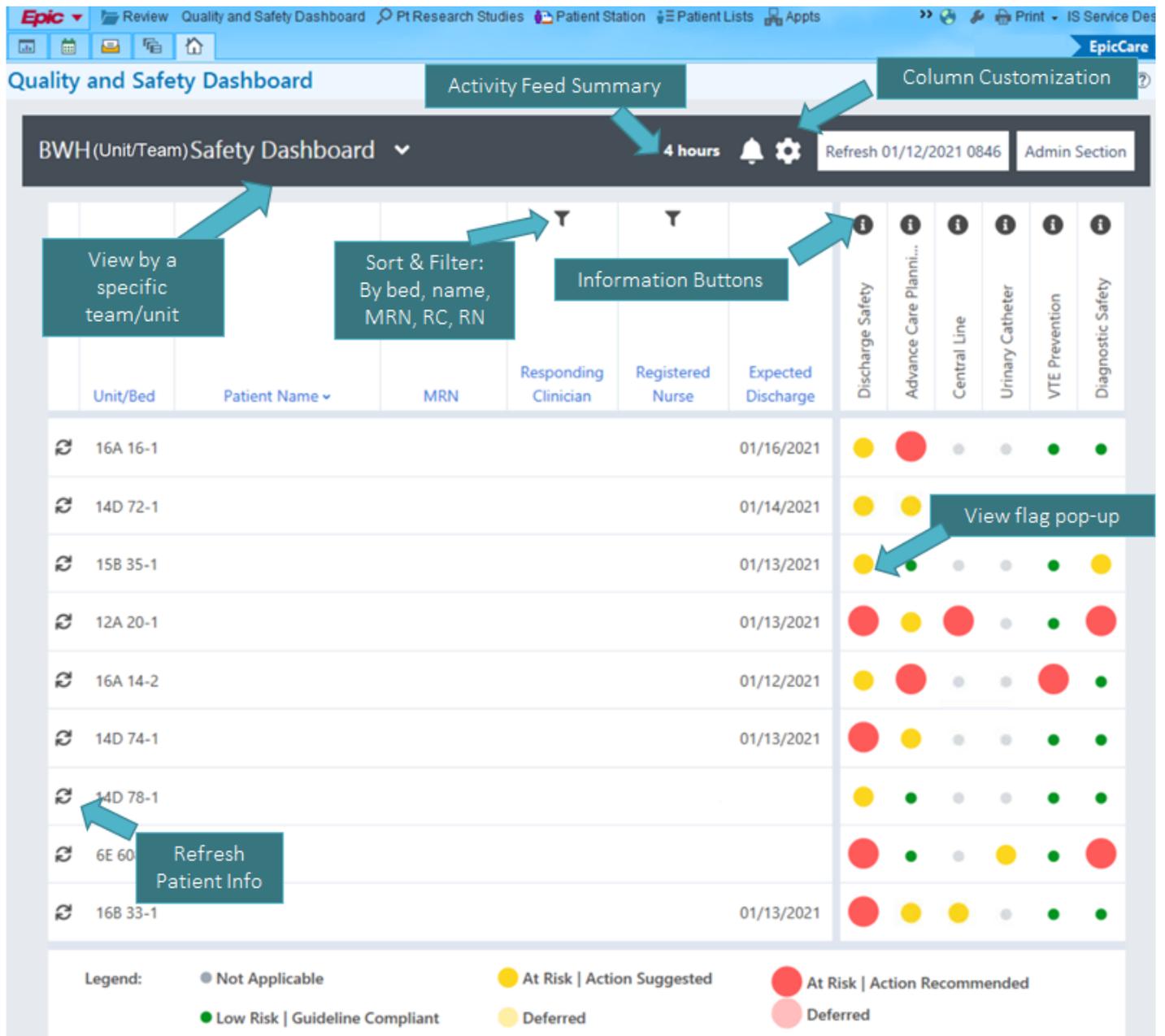
The Dashboard aims to provide clinical decision support, improve interdisciplinary conversations regarding patient safety concerns, and facilitate compliance with key institutional priorities across Brigham Health.

OVERVIEW

- About the Quality & Safety Dashboard
- Diagnostic Safety Column
- Advanced Care Planning Column
- Case of the Month
- Ways to Prevent Diagnostic Error

The Quality & Safety Dashboard consists of six primary columns:

- Discharge Safety
- Advanced Care Planning 
- Central Line
- Urinary Catheter
- VTE Prevention
- Diagnostic Safety 



Quality and Safety Dashboard

BWH(Unit/Team)Safety Dashboard ▾ 4 hours Refresh 01/12/2021 0846 Admin Section

Unit/Bed	Patient Name ▾	MRN	Responding Clinician	Registered Nurse	Expected Discharge	Discharge Safety	Advance Care Planni...	Central Line	Urinary Catheter	VTE Prevention	Diagnostic Safety
16A 16-1					01/16/2021	●	●	●	●	●	●
14D 72-1					01/14/2021	●	●	●	●	●	●
15B 35-1					01/13/2021	●	●	●	●	●	●
12A 20-1					01/13/2021	●	●	●	●	●	●
16A 14-2					01/12/2021	●	●	●	●	●	●
14D 74-1					01/13/2021	●	●	●	●	●	●
14D 78-1						●	●	●	●	●	●
6E 60						●	●	●	●	●	●
16B 33-1					01/13/2021	●	●	●	●	●	●

Legend:

- Not Applicable
- At Risk | Action Suggested
- At Risk | Action Recommended
- Low Risk | Guideline Compliant
- Deferred
- Deferred



By "wrenching in" the Dashboard, it will now be accessible to you within one click!

Featured Column: Diagnostic Safety

As a part of our diagnostic safety study, we have developed and refined a Diagnostic Safety column that enables you to:

- Identify patients at risk for diagnostic error
- Take a Diagnostic Time-Out
- Update the hospital Principal Problem
- View the patient's Deterioration Risk (EDI)
- View responses of patients who completed a Diagnostic Questionnaire (a 10-item survey that assesses patient's understanding and related concerns of their diagnosis, administered by our research team)

Diagnostic Time-out

Name the primary working diagnosis

Could the patient have a different understanding of this diagnosis?

MRN: - Diagnostic Safety

Action Needed: At risk for diagnostic error. Undifferentiated symptom for the principal problem. Take a **Diagnostic Time-Out**. Reconsider primary working diagnosis and update Problem List. Consider other diagnostic risk reduction measures ▼

Principal Problem	Nausea & vomiting
Dx entered by patient	
Patient Questionnaire	not submitted Send
Dx error risk factors	Recent ED visit for non-specific dx, High risk dx, 4 or more consultants, Patient concerns elicited
Deterioration Risk	20 (Low) ...

Defer for 1 day(s)



Featured Column: Advanced Care Planning

Serious Illness Conversations (SICs) help provide our patients with goal concordant care and improves patient and family satisfaction. The Advanced Care Planning tool brings attention to patients who may benefit from a SIC, such as those with the following criteria:

- High readmission risk (>28%)
- High Frailty Index (>0.3)
- Undocumented Code Status
- Links to previously documented SICs

Click “conduct a Serious Illness Conversation” to document a new conversation. To pull in the most recent documented SIC into your note, use the **.SIC** dot phrase.

MRN: - Advance Care Planning

Action Recommended: High readmission risk. High or undocumented frailty index. Serious Illness Conversation out of date. If appropriate, conduct a Serious Illness Conversation and/or Consult SAGE / Palliative Care.

Current Code Status	Full Code (has ACP docs) [12/14/2020 8:18 AM]
Code Status Order	Continue Existing Code Status [01/13/2021 17:52]
Serious Illness Conversation	None Documented
Readmission Risk	34%
Frailty Index	None Documented
Frailty Screen	None Documented

Defer for 1 day(s)



Flowsheet Pop-Up

Date: []

Documented By: []

Conversation Held With - Patient Patient Unable to Participate HCP Other

Patient illness understanding []

Hopes Live as long as possible Be comfortable Be mentally aware
 Be independent Be at home Achieve life goal
 Provide support for family Other

Worries Pain Other physical suffering Inability to care for others
 Loss of control Finances Being a burden Other

Prognostic information shared Curable Incurable Continued Decline Not Discussed Hours
 Days Weeks Months Years Other

What's important to patient/family []

Recommendations []

Accept Accept and Negx Cancel

Case of the Month

Case summary

91 y/o female with pulmonary hypertension, HFpEF, and BLE chronic venous stasis with recent discharge from rehab presenting after being found down at home. The patient reportedly tripped on a blanket upon standing. In the ED, her exam was notable for stable vitals (orthostatics were not performed), a systolic murmur, and 2+ edema of BLE. Labs, CT head and CXR were unremarkable. UA +nitrates/leukocytes. Received Fosfomycin x 1 dose. The primary working diagnosis was fall, likely mechanical with “multiple risk factors for impaired mobility and balance and likely insufficient care support at home.” The initial plan was to obtain a PT consult and to hold Lasix and metoprolol that the patient was taking.

On HD#2, the pharmacy med rec team noted that the patient had been taking three anti-hypertensives at home over the past week (enalapril, Lasix, and metoprolol, which was not elicited upon admission); however, Lasix and metoprolol were discontinued during her prior rehab admission. Hypotension from polypharmacy was subsequently considered as a likely mechanism for fall. The hospital course was complicated by dehydration, AKI and hyperkalemia. Enalapril was stopped and IVF boluses were administered, while continuing to hold Lasix and metoprolol. Her blood pressures improved. Upon discharge, the primary diagnosis was fall: polypharmacy (hypotension from meds) vs mechanical with insufficient home care.

Description of diagnostic error:

- Failure to perform a complete medication reconciliation upon presentation to the ED and hospital admission. The patient continued to take Lasix and metoprolol despite these being discontinued during the prior rehab admission.
- If a full medication reconciliation was performed, ideally by a pharmacist in the ED, the team may have considered polypharmacy resulting in iatrogenic hypotension sooner and may have also considered holding Enalapril (in addition to Lasix and metoprolol).
- At time of admission, a primary working diagnosis of mechanical fall was over-weighted. Fall due to orthostatic hypotension was not considered in the differential in context of an incomplete medication history.
- Orthostatic vitals not performed at the time of admission in an elderly patient with multiple risk factors and an admission diagnosis of fall with unclear etiology.

Outcome

After a thorough medication reconciliation was performed on HD #2, the team more heavily weighed polypharmacy leading to hypotension as the mechanism for fall.

- Most significant failures in the diagnostic process
- Framing bias & premature closure – elderly patient presented after recent rehab admission after being found down at home, framed as mechanical fall due to unstable gait/balance. A workup for other etiologies, including polypharmacy, was delayed or not considered.
- Incomplete history gathering – a thorough med rec was delayed in this elderly patient with a recent rehab encounter. Important medication changes across care transitions are common. It was not clearly recognized that the patient had continued to take the discontinued medications.

Harm

Moderate. In addition to fall, the patient experienced hypotension, hypovolemia, and AKI, which likely increased length of stay.

Risk factors for diagnostic error

- Polypharmacy in elderly
- Incomplete medication reconciliation
- Recent rehab encounter, 1 week prior to presentation

Lessons learned

- Understaffing in the ED could have contributed to an incomplete medication reconciliation.
- Performing a full medication history is especially important for elderly patients with risk factors for polypharmacy, recent care transitions/facility encounters during which medications could have been adjusted.
- Consider taking a “Diagnostic Time Out” when confronted with an undifferentiated admission diagnosis for the hospital Principal Problem.

If you would like to provide a Case of the Month for our next newsletter, we'd love to hear from you!

How can YOU improve quality and safety?

- Review the Quality and Safety Dashboard from the patient's chart when writing your notes
- All items in the "Safety Bundle" at the end of H&P's and progress notes are mirrored in the Dashboard, making this an optimal time for review
- Review the Dashboard with your residents, interns and/or APPs when running the list at the end of the day
- Conduct Diagnostic Time-Outs to address diagnostic uncertainty
- Prioritize patients who may benefit from a Serious Illness Conversation

Download our
Diagnostic Time-Out here:



Attend our
Diagnostic Safety Workshops
to learn more!

Keep an eye out for our weekly emails as you are coming onto your rotation or service! Users are also featured in our weekly usage reports! Thanks!

Contact Us!



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